

Amendments to the Claims:

This listing of claims will replace all prior listings of claims in the application.
Please cancel claims 39-82 without prejudice or disclaimer and add new claims 83-108:

Listing of Claims:

29-82. Cancelled.

83. (New) An energy generating power plant for integration with a high rise building and which is capable of energizing at least one power generating device, and receiving atmospheric wind energy from a first location and capturing the energy for transfer to another location to augment energy requirements of the building; the plant comprising:

a stack integrated with the building and having a base and at least one inlet and at least one outlet;

the at least one inlet leading to at least one through passage in the stack which each receive air drawn from an air source exterior of the building;

the air source generating an air stream upon entry into said at least one inlet thereby moving the air stream from the first location to said other location via a formation generating a vortex;

the at least one passage in the stack communicating between said at least one inlet and said at least one outlet and which each receive the air stream drawn from the air source;

the stream of air moving within the passage under the energy generated by said wind energy; the energy from the moving air stream being usable to energize an energy receiving device within the building for conversion or diversion of the energy; and

the formation comprising at least one helix extending longitudinally along the stack.

84. (New) An energy generating power plant according to claim 83 wherein the helix formation includes first and second helical sections.

85. (New) A power plant according to claim 84 wherein the first and second helix sections respectively define first and second helix passages.

86. (New) A power plant according to claim 85 wherein the first and second helix passages are separated from each other by a valve assembly which selectively allows air communication between said first and second passages.

87. (New) A power plant according to claim 86 wherein, the helix formations also incorporate a stairway.

88. (New) A power plant according to claim 87 wherein the stack is used to transfer air from surrounding city structures.

89. (New) A power plant according to claim 88 wherein the power generating device provides power for at least one building.

90. (New) A power plant according to claim 89 wherein the atmospheric wind contributes to a vortex updraft in the helix formations.

91. (New) A power plant according to claim 90 wherein the building further comprises a cladding defining at least one internal space between an outer surface of the cladding and an outer surface of the building.

92. (New) A power plant according to claim 91 wherein air in said at least one internal space is heated by solar power.

93. (New) A power plant according to claim 92 wherein the cladding comprises at least one layer of glass which allows solar radiation to pass therethrough, thereby heating the air in the at least one space which supplements air drawn into said stack from the atmosphere.

94. (New) A power plant according to claim 93 wherein the at least one space is capable of receiving water for heating by solar power.

95. (New) A power plant according to claim 94 wherein heated air rising in said helix spiral is supplemented by air heated in said space between the cladding and said building.

96. (New) A power plant according to claim 95 wherein, the at least one space includes solar radiation collectors.

97. (New) A power plant according to claim 96 wherein each solar radiation collector includes at least one air passage which receive thermal energy from a heating source to supplement heating of air drawn into the building.

98. (New) A power plant according to claim 97 wherein condensate from said cladding surfaces is collected by a pipe network for use as a water supply.

99.(New) A power plant according to claim 98 wherein said heating source is provided by waste heat of air conditioning systems from nearby structures.

100. (New) A power plant according to claim 98 wherein said heating source is provided by water circulated in glazing systems.

101. (New) A power plant according to claim 99 wherein said heating source is provided by heat absorbed by hard surfaces.

102. (New) A power plant according to claim 99 wherein said heating source is provided by heat trapped by glass roofs.

103. (New) A power plant according to claim 99 wherein said heating source is provided by piped hot water.

104. (New) A power plant according to claim 99 wherein the stack is inside the building.

105. (New) A power plant according to claim 99 wherein the stack is located outside the building.

106. (New) A power plant according to claim 105 wherein a baffle channels said air along passages in said stack to generate an air spiral.

107. (New) A power plant according to claim 106 wherein said baffle is computer controlled.

108. (New) A power plant according to claim 107 wherein the inlets to the stack include adjustable louvers.